

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
John C. Harvey *et al.*

Application No.: 08/446,553

Filed: May 19, 1995

For: SIGNAL PROCESSING APPARATUS AND  
METHODS

Confirmation No.: 7587

Art Unit: 2624

Examiner: Yubin Hung

**INTERVIEW SUMMARY**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby submit the following Examiner interview summaries that are relevant to the allowance of this application.

**Summary of Interviews**

**MAY 4, 2009**

The prosecution of this application, along with all but two of Applicants' copending application, was suspended for several years pending the outcome of the appeal of Application Serial Nos. 08/470,571 and 08/487,526 and the reexamination proceedings of seven related patents. Applicants inquired into the status of these applications in January, 2009, as the current six-month suspension period expired. Applicants requested that the suspension of these applications not be renewed. The Office, through Supervisory Examiner David L. Ometz indicated that the suspensions would not be renewed and that prosecution would recommence. Applicants wish to thank Examiner David L. Ometz for the courtesy of the interview held on May 4, 2009 in which Applicants' representatives and the Examiners discussed an overall plan for examination of the remaining 110 applications which relate to this application and have a

common chain of priority. Applicants were informed that the Patent and Trademark Office (PTO) was developing a plan to resume examination and that Applicants would be informed when the plan was in place.

### **JULY 22, 2009**

Applicants were informed in July, 2009, that a team of examiners had been assembled to examine Applicants' copending applications. Applicants appreciate the courtesies extended to Applicants' Representatives in a meeting held July 22, 2009, with the examination team. In attendance at the meeting were Thomas J. Scott, Jr. and Carl L. Benson, of Goodwin Procter and the PTO personnel identified on the attached list. Applicants' representatives made a presentation to the Examiners in attendance in accordance with the attached agenda and provided the materials attached hereto to the Examiners for their consideration and use in the further examination of this application and the other application related to this application as identified in Tab 2 of the materials provided to the Examiners in the meeting. Applicants' representatives agreed to respond to any telephone inquiries or to be present for personal interview at the PTO in any circumstance where the Examiner believed such an interview would advance the prosecution of this application.

### **MARCH AND APRIL 2010**

The Examiner and Applicants' representatives conducted a series of interviews regarding this application in March and April of 2010. During the interviews, the Examiner indicated that the article *Telesoftware – Value Added Teletext*, IEEE Transactions on Consumer Electronics, Vol. CE-26 August 1980, pp. 555-556, by Hedger *et al.* disclosed elements of the claimed invention, particularly claim 59. In response, Applicants provided proposed amendments to the claims and provided support from the parent application for the amended claims. The Examiner suggested several further changes to the claims, and suggested cancelling claim 59. The Examiner asserted that claim 2 as proposed would be subject to a double-patenting rejection over claim 3 of Applicant's copending Applications No. 08/447,496 in view of Brown *et al.* ("Calculating least cost machinery size for grain farms using electronic spreadsheet," Canadian Journal of Agriculture Economics, No. 33, March 1985, pp. 47-65) and Davis ("Strategic, Tactical, and Operational Planning and Budgeting: A Study of Decision Support System

Evolution,” MIS Quarterly, December 1979, pp. 1-19). Applicants agreed to the suggested amendment and cancellation of claim 59 to avoid the prior art. Applicant and the Examiner further agreed that to avoid the double-patenting rejection the Applicants will file a Terminal Disclaimer. Filed herewith is a Terminal Disclaimer disclaiming, in essential terms, the terminal part of the statutory term of any patent granted on the above-referenced application, extending beyond the earliest expiration date of the full statutory term defined in 35 U.S.C. § 154 to 156 and 173 as shortened by any terminal disclaimer filed prior to the grant of any patent granted on Application No. 08/447,496.

The allowable claims, as agreed to by the Examiner and Applicants, are as follows. It is the understanding of Applicants that the Examiner will enter the following amendment prior to the allowance of the above-referenced application.

1. (Canceled)

2. (Currently amended) A method of processing signals at a receiver station based upon receiving at least one of a broadcast and a cablecast transmission, said receiver station including a computer, said method comprising:

receiving in said at least one of a broadcast and a cablecast transmission information content [,] and at least one control signal with respect to [a] budgeting at said receiver station [, and said at least one of a broadcast and a cablecast transmission ], said information content [and said at least one control signal] including a first projected datum , said first projected datum designating a product or service and projecting a price or quantity;

storing said first projected datum in said computer;

storing subscriber resource data at said receiver station, said resource data including at least two of:

(1) an equipment or real estate datum;

(2) a labor datum; and

(3) a financial datum;

generating budget data using said computer by processing data stored in said computer in response to said at least one control signal, said data stored in said computer including said first

projected datum and said subscriber resource [user] data, said budget data including at least two of:

- (1) an income datum;
- (2) an expense datum; and
- (3) a profit datum; and

outputting to a subscriber at least a portion of said information content and at least one of said budget data , wherein said information content explains at least a portion of a [receiver] subscriber specific budget including said budget data.

3. (Cancelled)

4. (Currently amended) The method of claim 2 further comprising the step of programming said computer to respond to said [broadcast or cablecast ] at least one control signal [in] with respect to [of] [said] budgeting.

5-16. (Canceled)

17. (Currently amended) An interactive method for information delivery at [, useful with] an interactive mass medium program output apparatus, said interactive mass medium program output apparatus including an input device to receive input from a subscriber, an output device for outputting information, a transmitter for communicating information to a remote station, and a receiver for receiving a signal from said remote station, said interactive mass medium program output apparatus together with said remote station [comprising a network including] and a plurality of transmitter stations comprising a network, said method comprising the steps of:

outputting from said output device mass medium programming including or explaining at least one [receiver] subscriber specific datum;

prompting input with respect to said mass medium programming from said subscriber during said [mass medium programming] outputting [with respect to said information];

receiving a reply from said subscriber at said input device in response to said prompting;

communicating said reply to a remote station [site], wherein said reply is processed to formulate or assemble a signal effective at said intermediate mass medium program output apparatus to generate and deliver subscriber specific budget data;

receiving, at said interactive mass medium program output apparatus, said signal  
~~performing at least one of formulating and assembling at in said network a signal effective at~~  
~~said interactive mass medium program output apparatus to deliver user specific budget data; and~~  
generating said subscriber specific budget at said apparatus and delivering said budget [a  
user specific budget] at said output device of said apparatus on the basis of said signal.

18. (Previously presented) The method of claim 2, wherein said information content includes mass medium programming of a duration, and wherein only a portion of said duration includes a time interval of specific relevance, said method further comprising the steps of:

outputting said mass medium programming at said receiver station; and  
outputting one of said budget data in said time interval.

19-39. (Canceled)

40. (Currently amended) A method of processing signals at a receiver station based on at least one of a broadcast and a cablecast transmission including:

~~(a) the step of receiving in said at least one of a broadcast and a cablecast transmission~~  
information content and at least one control signal with respect to budgeting at said receiver station [in said one of said broadcast and said cablecast transmission], said information content [and said at least one control signal] including a first projected datum, said first projected datum designating at least one of a product and a service and being a [projected] first projection of a price [and] or a quantity;

~~(b) the step of storing said first projected datum in a computer at said receiver station;~~  
storing subscriber resource data at said computer at said receiver station, said resource data including at least two of the group of:

- (1) one of an equipment and a real estate datum;
- (2) a labor datum; and
- (3) a financial datum;

~~(c) the step of~~ generating [said] a budget by processing data stored in said computer in response to said at least one control signal, said data stored in said computer including said first projected datum and said subscriber resource ~~user~~-data, said budget including a second projected datum and at least two of the group of:

- (1) an income datum;
- (2) an expense datum; and
- (3) a profit datum;

said second projected datum designating said at least one of a [said] product and a [said] service and being a [the] second projection~~ed~~ second] of said price [and said] or quantity; and

~~(d) the step of~~ transmitting said second projected datum from said receiver station to a data collection station.

41. (Cancelled)

42. (Currently amended) The method of claim 40 further comprising a [the] step of programming said computer to respond to said at least one [of said broadcast and said cablecast] control signal [in] with respect to [of] said budgeting.

43-46. (Canceled)

47. (Currently amended) A method of controlling at least one of a plurality of receiver stations each of which includes one of a broadcast and a cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive signals from one of a broadcast and a cablecast signal, and said processor programmed to respond to signals from said detector, and said method of controlling comprising the steps of:

[(1)] receiving at one of a broadcast and a cablecast transmitter station a broadcast or cablecast transmission with information content including a first projected datum designating at least one of a product and a service and being a first projection of a price or a quantity;

transferring said broadcast or cable cast transmission to a transmitter at said transmitter station;

receiving at said one of a broadcast and a cablecast transmitter station an instruct signal that causes said at least one processor at said at least one of a plurality of receiver stations to generate a budget by processing said first projected datum and subscriber resource data stored at said at least one processor, wherein said subscriber resource data including at least two of the group of (1) one of an equipment and a real estate datum, (2) a labor datum, and (3) a financial datum; said generated budget including a second projected datum and at least two of the group of (1) an income datum, (2) an expense datum, and (3) a profit datum, and said second projected datum designating said at least one of a product and a service and being a second projection of said price or quantity which is effective at the receiver station to generate and communicate to a remote station at least one of a price and quantity datum of a budget;

[(2)] transferring said instruct signal to a said transmitter at said transmitter station;

[(3)] receiving at least one first control signal at said transmitter station, said at least one first control signal identifying at least one specific receiver station ~~in~~ to which said instruct signal is addressed; ~~and~~

[(4)] ~~transferring said at least one control signal to a transmitter, said transmitter station performing one of the functions of broadcasting or [and] cablecasting said instruct signal and said broadcast or cablecast transmission at least one control signal to said at least one of a plurality of receiver stations in accordance with said at least one first control signal, and~~

receiving said second projected datum from said at least one of a plurality of receiver stations at a data collection station.

48. (Previously presented) The method of claim 47, wherein at least one of said instruct signal and said at least one first control signal is embedded in the non-visible portion of a television signal.

49. (Currently amended) The method of claim 47, wherein said at least one first control signal identifies at least two of said plurality of receiver stations asynchronously and each of said at least two identified receiver stations receives and responds to said instruct signal asynchronously.

50. (Currently amended) The method of claim 47, wherein a switch at said transmitter station communicates to said transmitter signals selectively selected from one of signal sources including said one of said broadcast and said cablecast receiver receivers at said transmitter station and one of a memory and a recorder ~~to said transmitter~~, said method further comprising at least one step from the group consisting of:

detecting at said transmitter station at least one of said instruct signal and a second control signal which is effective at the transmitter station to instruct communication;

determining a specific signal source from which to communicate at least one of said instruct signal and said at least one first control signal to [a] said transmitter;

controlling said switch to communicate one of said instruct signal and said at least one first control signal to said transmitter in response to a second control signal, which is effective at the transmitter station to instruct communication;

controlling said switch to communicate at least one of said instruct signal and said at least one first control signal from a selected signal source; and

controlling said switch to communicate [to] from said one of ~~said~~ a memory and said a recorder at least one of said instruct signal and said at least one first control signal.

51. (Currently amended) The method of claim 47, [wherein a controller controls] further comprising controlling a switch to communicate to said transmitter a selected signal using a controller and [, further comprising] at least one step from the group consisting of:

detecting at said transmitter station at least one of said instruct signal and said at least one first control signal, which is effective at the transmitter station to instruct transmission;

inputting to said controller at least one of said instruct signal and said at least one first control signal, which is effective to control said switch;

controlling said switch to communicate at least one of said instruct signal and said at least one first control signal to said transmitter according to a transmission schedule; and

controlling said switch to communicate at least one of said instruct signal and said at least one first control signal from a specific one of a plurality of signal sources; ~~and~~

~~controlling said switch to communicate at least one of said instruct signal and said at least one first control signal to a selected one of a plurality of transmitters.~~



52-53. (Canceled)

54. (Currently amended) The method of claim 47, wherein said at least one of a plurality of receiver stations is [at least one of] adapted to detect the presence of said at least one first control signal on the basis of the location of a signal in an information transmission , [and] or programmed to respond to said instruct signal on the basis of the location of a signal in an information transmission, or both, said method further comprising the step of:

causing at least a portion of at least one of said control signal and said instruct signal to be transmitted in said location.

55. (Currently amended) A method of processing signals at a receiver station based on at least one transmission from one of a broadcast transmitter and a cablecast transmitter including:

receiving in said at least one transmission from said one of ~~said~~ a broadcast transmitter and a cablecast transmitter information content and at least one control signal in respect of [a] budgeting at said receiver station [in said at least one transmission from said one of said broadcast transmitter and said cablecast transmitter], said information content describing at least one of a resource product and a service;

storing subscriber resource data at a computer at said receiver station, said subscriber resource data including at least one of the group consisting of:

(a) an equipment datum;

(b) a real estate datum; and

(c) a labor datum;

generating a value datum using said computer at said receiver station by processing said information content and said stored subscribe resource data ~~stored in computer~~ in response to said at least one control signal, said value datum being a projected value in respect of said at least one of a [said] resource product and a [said] service;

storing said value datum in said computer; and

delivering to a subscriber said received information content [of said at least one of said resource product and said service] and said value datum.

56. (Cancelled)

57. (Currently amended) The method of claim 55 further comprising the step of storing a budget in said computer, said budget including a projected datum and at least two of the group consisting of:

- (a) an income datum;
- (b) an expense datum; and
- (c) a profit datum;

said projected datum designating said at least one of a resource product and a service being a projection[ed datum] of at least one of a price and a quantity.

58. (Previously presented) The method of claim 55 further comprising the step of programming said computer to respond to said at least one control signal in respect of said budget.

59-62. (Canceled)

63. (Currently amended) A method of communicating mass medium program material to at least one receiver station, said at least one receiver station including one of a broadcast mass medium programming receiver and a cablecast mass medium programming receiver, an output device, a control signal detector, a processor operably connected to said output device, and with each said at least one receiver station adapted to detect and respond to at least one instruct signal, said method comprising the steps of:

~~[(1)] receiving at a transmitter station mass medium programming to be transmitted [at a transmitter station] and delivering said mass medium programming to an origination transmitter at said transmitter station;~~

~~[(2)] receiving and storing said at least one instruct signal at said transmitter station, [wherein] said at least one instruct signal operates] at said at least one receiver station to deliver output information of at least one of a product and a service with a user specific projected value of said at least one of a [said] product and [said] service;~~

~~[(3)] transferring said at least one instruct signal to said origination transmitter; and~~

~~[(4)] transmitting from said transmitter station an information transmission including said mass medium programming and said at least one instruct signal and~~  
receiving at a transmitter station mass medium programming to be transmitted and  
delivering said mass medium programming to an origination transmitter at said transmitter station;  
receiving and storing said at least one instruct signal at said transmitter station;  
transferring said at least one instruct signal to said origination transmitter;  
transmitting from said transmitter station an information transmission including said mass medium programming including or explaining at least one subscriber specific datum and said at least one instruct signal to said at least one receiver station;  
receiving a reply from said at least one receiver station, where said reply is received from a subscriber at said at least one receiver station in response to a prompt for input with respect to said mass medium programming during output of said mass medium programming from said output device;  
processing said reply to formulate or assemble a control signal effective at said receiver station to generate and deliver subscriber specific budget data; and  
transmitting said control signal to said receiver station.

64. (Currently amended) The method of claim 63, wherein ~~identification data and~~ said at least one instruct signal ~~are~~ is embedded in a mass medium programming signal, said mass medium programming signal including said mass medium programming.

65. (Currently amended) The method of claim 63 , wherein said step of transmitting directs said information transmission to a plurality of remote receiver stations at the same time and each of said plurality of remote receiver stations performs at least one of receiving[es] and responding[s] to said at least one instruct signal concurrently.

66. (Previously presented) The method of claim 63 , wherein said step of transmitting directs said information transmission to each of a plurality of remote receiver stations at different times and each of said plurality of remote receiver stations responds to said at least one instruct signal at a different time.

67. (Currently amended) The method of claim 63, further comprising the steps of:  
receiving said mass medium programming at a receiver in said transmitter station;  
communicating said mass medium programming from said receiver to a memory location  
in said transmitter station; and  
storing said mass medium programming at said memory location for a period of time  
prior to communicating said mass medium programming to said origination transmitter.

68. (Currently amended) A method of delivering at least one of a receiver specific  
budget and a master budget to [at] a video receiver station including:  
receiving at least one information transmission at said video receiver station , said at least  
one information transmission including generally applicable budget information and a plurality  
of budgeting control signals, at least one of said plurality of budgeting control signals being  
received from at least one remote transmitter station, said generally applicable budget  
information including:

(1) at least a portion of said at least one of a [said] receiver specific budget and a [said]  
master budget; and

(2) video to serve as a basis on which to present said at least a portion of said at least one  
of a [said] receiver specific budget and a [said] master budget;[, at least one of said plurality of  
budgeting control signals being received from at least one remote transmitter station;]

storing at least a portion of said generally applicable budget information and said  
plurality of budgeting control signals at said video receiver station;

outputting said video at a video monitor;

selecting, at said video receiver station, budget data to output by processing said  
generally applicable budget information in accordance with a first of said plurality of budgeting  
control signals;

outputting said selected budget data in a series of time periods of specific relevance to  
said selected budget data in response to a second of said plurality of budgeting control signals;  
and

producing said at least a portion of said at least one of a [said] receiver specific budget and a [said] master budget at a specific [video] location of said video at said video monitor during a first of said series of time periods of specific relevance.

69. (Previously presented) The method of claim 68, wherein said video receiver station generates receiver-specific budget data in accordance with said first of said plurality of budgeting control signals , said method further comprising the step of outputting said generated budget data in a second of said series of time periods of specific relevance.

70. (Currently amended) The method of claim 68, further comprising the step of outputting at least one of said selected budget data at an audio speaker.

71. (Currently amended) The method of claim 70, further comprising the step of outputting at said audio speaker audio which explains said at least one of a [said] receiver specific budget and a [said] master budget.

72. (Previously presented) The method of claim 68 , wherein said video includes at least a portion of a television program, said method further comprising the step of synchronizing the delivery of the balance of said television program at said video receiver station based on said plurality of budgeting control signals.

73. (Previously presented) The method of claim 68, wherein said video receiver station includes a video random access memory (RAM) operably connected to said video monitor, said method further comprising the step of clearing said video random access memory (RAM) in response to a third of said plurality of budgeting control signals.

74. (Currently amended) The method of claim 68 , wherein said video receiver station includes a programmable controller which controls at least one of a code portion receiver, a control signal detector, and a computer adapted to generate a video overlay, said method further comprising the steps of:

detecting a control program in one of said at least one information transmission; and

programming said programmable controller using said control program.

75. (Currently amended) A method of delivering at least one of a receiver specific budget and a master budget to a graphic receiver station including:

receiving at least one information transmission at said graphic receiver station, said at least one information transmission including generally applicable budget information and a plurality of budgeting control signals, at least one of said plurality of budgeting control signals being received from at least one remote transmitter station, said generally applicable budget information including:

(1) at least a portion of said at least one of a a [said] receiver specific budget and a [said] master budget; and

(2) at least a portion of a graphic image to serve as a basis on which to present said at least a portion of a a [said] receiver specific budget and a [said] master budget;[, at least one of said plurality of budgeting control signals being received from at least one remote transmitter station;]

storing at least a portion of said generally applicable budget information and said plurality of budgeting control signals at said graphic receiver station;

outputting said at least a portion of said graphic image at a graphic output device;

selecting, at said graphic receiver station, budget data to output by processing said generally applicable budget information in accordance with a first of said plurality of budgeting control signals;

outputting said selected budget data during at least one time period of specific relevance to said selected budget data in response to a second of said budgeting control signals; and

outputting said at least a portion of said at least one of a [said] receiver specific budget and a [said] master budget at said graphic display device based on a reference point and a scalar dimension.

76. (Currently amended) The method of claim 75, further comprising the step of outputting at an audio speaker audio which explains said at least one of a [said] receiver specific budget and a [said] master budget.

77. (Currently amended) The method of claim 75, wherein said graphic receiver station includes a plurality of graphic output devices , said method further comprising the step of selecting one of said plurality graphic output devices at which to output at least one of said selected budget data and said at least a portion of said at least one of a [said] receiver specific budget and a [said] master budget.

78. (Currently amended) The method of claim 75, wherein said at least a portion of a [said] graphic image is part of a television program, said method further comprising the step of processing a viewer response to said television program in accordance with at least one of said plurality of budgeting control signals.

79-104. (Canceled)

## **CONCLUSION**

Applicants appreciate the Examiner's time and consideration in this matter.

Dated: May 4, 2010

Respectfully submitted,

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